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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,699	03/09/2001	Jun Amako	108850	3250

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EXAMINER

HUYNH, LOUIS K

ART UNIT

PAPER NUMBER

3721

DATE MAILED: 02/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,699

Applicant(s)

AMAKO ET AL. CM

Examiner

Louis K. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 14-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☐ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 0801 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-13 in Paper No. ^{Sub}10 is acknowledged. The traversal is on the ground(s) that the search for the subject matter of any one group of claims would encompass a search for the subject matter of the remaining claims. This is not found persuasive because the method as claimed in claim 1 can be practiced by another materially different from the apparatus as claimed in claim 13 and vice versa as set forth in the previous action.

Furthermore, it is recognized that claim 22 is **product-by-process claim**; however, a product defined by the process by which it can be made is still a product and can be restricted from the process if the examiner can demonstrate that the criteria for distinction between the product and the process, as discussed above, is met. (See *In re Bridgeford*, 149 USPQ 55 (CCPA 1966)). In this case, (1) the process as claimed can be used to make other and materially different product such as a liquid or grain product that prevents the use of vacuum through a hole in the case to hold the lid or (2) that the product as claimed can be made by another and materially different process such melting the bonding member by ultra-sonic.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 14-22 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 13 are indefinite for lacking the step of providing the lid, the case having the product/electronic device therein, it is unclear what lid and/or case applicant is referring to.

Claim 9, line 2: "light energy" lacks proper antecedent basis.

Claim 10, line 4: "can be" renders the claim indefinite for it is unclear whether or not the diffraction light pattern is obtained at the desired location with desired dimensions.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yen et al. (US 5,772,817).

Yen discloses a method of sealing a pellicle frame (12) housing a mask with a pellicle membrane (14) including the steps of: applying a bonding member (19) on the pellicle frame, baking the bonding member in an oven (column 5, lines 27-29), interposing the baked bonding member (19) between the pellicle frame (12) and the pellicle membrane (14), fixing the pellicle membrane (14) to the pellicle frame by pressure from the weight of a perimeter frame (15) (column 4, lines 44-51), and irradiating the bonding member (19) with an infrared CO₂ laser beam scanning entirely around the perimeter of the pellicle frame (column 6, lines 7-26); wherein the temperature distribution over the bonding member is monitored to maintain a low temperature to partially melt the pellicle membrane and the bonding member without breaking the membrane (column 5, lines 51-55).

7. Claims 1-3 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishihara et al. (US 5,263,888).

Ishihara discloses a method of sealing a liquid crystal display panel including the steps of: interposing a bonding member (3) between the case (1b) and the lid (14), fixing the lid to the case by pressure between supports members (8 & 10), and irradiating the bonding member (3) with an ultra-violet light (column 4, lines 22-25).

8. Claims 1-3 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kahl et al. (US 6,420,649).

Kahl discloses a method of sealing a case (12) housing an electronic circuit (13) with a lid (14) including the steps of: interposing a bonding member (21) between the case (12) and the lid (14), fixing the lid to the case by pressure (Figure 6; column 5, line 38-41), and irradiating the bonding member with a laser beam (column 5, lines 4-7).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kahl et al. (US 6,420,649) in view of Bird (US 5,729,963).

The method of Kahl meets all of applicant's claimed subject matter but lacks the specific teaching of the case being provided with a through hole so that the lid and the case are held together by vacuum suction through the hole.

However, Bird teaches a method of holding a article (118) to a carrying case (112) by applying vacuum suction through a hole (117) provided in the bottom wall of the carrying case (112) (column 5, lines 20-23). Furthermore, Kahl teaches that any suitable method can be used to hold the lid (14) against the case (12) including providing a through hole in the case (14) for the bolt (26) (Figure 5).

Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the method of Kahl by having provided a vacuum system, as taught by Bird, in order to provide vacuum suction through the through hole provided in the bottom of the case as an alternative for holding the lid against the case.

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11. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen et al. (US 5,772,817) in view of Rosenberg (US 5,877,874).

The method of Yen meets all of applicant's claimed subject matter but lacks the specific teaching of the laser beam being projected through a phase hologram to generate a diffraction light pattern so that the bonding member is irradiated at a time as a whole.

However, Rosenberg teaches the holographic optical film is well known in the art for generating diffraction light patterns (column 1, lines 21-55). Furthermore, Rosenberg teaches a method of concentrating light source by using holographic planar concentrator having a multiplexed holographic optical film for collecting solar energy and directing the energy to the collecting devices.

Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the method of Yen by having provided a phase hologram, as taught by Rosenberg, for generating a diffraction light pattern of the bonding member so that the generated diffraction light pattern could irradiate the bonding member disposed on the pellicle frame at the same time.

With respect to claim 9, adjusting the order of the diffracted light energy is well known in the optical art and thus does not patentably distinguish the claimed invention over the applied prior art.

With respect to claim 10, condensing lens is well known in the optical art for focusing a light beam; therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the method of Yen by having provided a condensing lens in order to focus the laser beam onto the phase hologram.

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Allowable Subject Matter

12. Claims 5 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

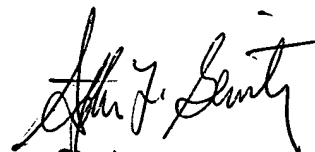
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and has been cited on the form PTO-892.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (703) 306-5694. The examiner can normally be reached on M-F from 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (703) 308-2187. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 308-7769 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

LH
February 4, 2003


Stephen F. Gerrity
Primary Examiner